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Please amend the claims as follows:

- 1. (original) A method for the heating of magnetic particles which are present in a target region, which method includes the steps of
- a) generating a magnetic field whose magnetic field strength varies in space in such a manner that a first sub-region (301) having a low magnetic field strength and a second sub-region (302) having a higher magnetic field strength are formed in the target region,
- b) changing the position in space of the two sub-regions in the target region for so long and with such a frequency that the target region is heated.
- 2. (original) A method as claimed in claim 1, in which a spatially and temporally variable magnetic field is generated in order to change the position in space of the two sub-regions in the target region.
- 3. (original) The use of monodomain particles of a ferromagnetic material or a ferrimagnetic material in a method as claimed in claim 1.

- 4. (original) The use of multidomain particles of a ferromagnetic material or a ferrimagnetic material in a method as claimed in claim 1.
- 5. (original) The use of substrates which have dimensions in the μm range and are provided with a layer of a ferromagnetic soft material which is thin in comparison with said dimensions as multidomain particles as claimed in claim 4.
- 6. (currently amended) The use of the particles claimed in claim 3 6 4 in a colloidal dispersion.
- 7. (original) The use of particles enclosed by a molecular envelope for tissue-specific concentration in a method as claimed in claim 1.
- 8. (original) The use of particles in a method as claimed in claim 1, where the Curie temperature of the particles corresponds to the temperature prevailing in the target region after the desired heating or corresponds to a maximum permissible temperature in the target region.

- 9. (original) An arrangement for carrying out the method claimed in claim 1, which arrangement includes
- a) means for generating a magnetic field whose magnetic field strength varies in space in such a manner that a first subregion (301) having a low magnetic field strength and a second subregion (302) having a higher magnetic field strength are formed in the target region,
- b) means for changing the position in space of the two subregions in the target region for so long and at such a frequency that the target region is heated.
- 10. (original) An arrangement as claimed in claim 9, in which the means for generating the magnetic field include a permanent magnet arrangement for generating a magnetic gradient field whose direction is reversed in the first sub-region of the target region and which comprises a zero-crossing.
- 11. (original) An arrangement as claimed in claim 9, in which the means for generating the magnetic field including a gradient coil system for generating a magnetic gradient field whose direction is reversed in the first sub-region of the target region and which comprises a zero-crossing.

- 12. (original) An arrangement as claimed in claim 9, comprising means for generating a magnetic field which is superposed on the magnetic gradient field and which varies in time in order to shift the two sub-regions in the target region.
- 13. (original) An arrangement as claimed in claim 9, comprising means for generating a first magnetic field and at least two further magnetic fields which are superposed on the magnetic gradient field, the first magnetic field being variable rapidly in time and with a low amplitude whereas the two further magnetic fields are variable slowly in time and with a high amplitude.
- 14. (original) An arrangement as claimed in claim 13, in which the three magnetic fields extend essentially perpendicularly to one another in the target region.